

RRRRRRRRRRRR		MMM		MMM	SSSSSSSSSSSS
RRRRRRRRRRRR		MMM		MMM	SSSSSSSSSSSS
RRRRRRRRRRRR		MMM		MMM	SSSSSSSSSSSS
RRR	RRR	MMMMMM	MMMMMM	SSS	
RRR	RRR	MMMMMM	MMMMMM	SSS	
RRR	RRR	MMMMMM	MMMMMM	SSS	
RRR	RRR	MMM	MMM	SSS	
RRR	RRR	MMM	MMM	SSS	
RRR	RRR	MMM	MMM	SSS	
RRRRRRRRRRRR		MMM		SSSSSSSSSS	
RRRRRRRRRRRR		MMM		SSSSSSSSSS	
RRRRRRRRRRRR		MMM		SSSSSSSSSS	
RRR	RRR	MMM			SSS
RRR	RRR	MMM			SSS
RRR	RRR	MMM			SSS
RRR	RRR	MMM			SSS
RRR	RRR	MMM			SSS
RRR	RRR	MMM			SSS
RRR	RRR	MMM			SSS
RRR	RRR	MMM		SSSSSSSSSSSS	
RRR	RRR	MMM		SSSSSSSSSSSS	
RRR	RRR	MMM		SSSSSSSSSSSS	

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RRRRRRRR      MM      MM      SSSSSSSS      000000      FFFFFFFFFF      IIIIII      NN      NN      DDDDDDDD
RRRRRRRR      MM      MM      SSSSSSSS      000000      FFFFFFFFFF      IIIIII      NN      NN      DDDDDDDD
RR      RR      MMMM      MMMM      SS      00      00      FF      II      NN      NN      DD      DD
RR      RR      MMMM      MMMM      SS      00      00      FF      II      NN      NN      DD      DD
RR      RR      MM      MM      SS      00      0000      FF      II      NNNN      NN      DD      DD
RR      RR      MM      MM      SS      00      0000      FF      II      NNNN      NN      DD      DD
RRRRRRRR      MM      MM      SSSSSS      00      00      00      FFFFFFFF      NN      NN      DD      DD
RRRRRRRR      MM      MM      SSSSSS      00      00      00      FFFFFFFF      NN      NN      DD      DD
RR      RR      MM      MM      SS      0000      00      FF      II      NN      NN      DD      DD
RR      RR      MM      MM      SS      0000      00      FF      II      NN      NN      DD      DD
RR      RR      MM      MM      SS      00      00      FF      II      NN      NN      DD      DD
RR      RR      MM      MM      SS      00      00      FF      II      NN      NN      DD      DD
RR      RR      MM      MM      SSSSSSSS      000000      FF      IIIIII      NN      NN      DDDDDDDD
RR      RR      MM      MM      SSSSSSSS      000000      FF      IIIIII      NN      NN      DDDDDDDD
                                     ....
                                     ....
                                     ....
                                     ....

LL      IIIIII      SSSSSSSS
LL      IIIIII      SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLLLL      IIIIII      SSSSSSSS
LLLLLLLLLLLL      IIIIII      SSSSSSSS

```

(2) 62  
(3) 86

DECLARATIONS  
RMS\$FIND - COMMON \$FIND SETUP AND DISPATCH ROUTINE

```
0000 1          $BEGIN RMSOFIND,000,RM$RMS,<DISPATCH FOR FIND OPERATION>
0000 2
0000 3
0000 4
0000 5 *****
0000 6 *
0000 7 *  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 10 *
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0000 17 *
0000 18 *  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
0000 19 *  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
0000 20 *  CORPORATION.
0000 21 *
0000 22 *  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0000 23 *  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 24 *
0000 25 *****
0000 26
0000 27 ++
0000 28 Facility: rms32
0000 29
0000 30 Abstract:
0000 31 this routine is the highest level control
0000 32 routine to perform the $find function.
0000 33
0000 34
0000 35
0000 36 Environment:
0000 37 star processor running starlet exec.
0000 38
0000 39 Author: L F Laverdure, creation date: 3-FEB-1977
0000 40
0000 41 Modified By:
0000 42
0000 43 V03-004 KPL0003 Peter Lieberwirth 26-Jul-1983
0000 44 Identify RJR=FIND if this is AT journaling.
0000 45
0000 46 V03-003 KPL0002 Peter Lieberwirth 24-Jul-1983
0000 47 If AT journaling, get info from RAB describing user's request.
0000 48
0000 49 V03-002 KPL0001 Peter Lieberwirth 27-May-1983
0000 50 Insulate the case branch from truncation errors.
0000 51
0000 52 V03-001 KBT0182 Keith B. Thompson 23-Aug-1982
0000 53 Reorganize psects
0000 54
0000 55 V005 REFORMAT Ken Henderson 30-JUL-1980 7:38
0000 56 the code was reformatted
0000 57
```



RMSOFIND  
V04-000

DISPATCH FOR FIND OPERATION

I 15

16-SEP-1984 01:18:57 VAX/VMS Macro V04-00  
5-SEP-1984 16:24:58 [RMS.SRC]RMSOFIND.MAR;1

Page 2  
(1)

0000 58 :--  
0000 59 :  
0000 60 :

```
0000 62      .SBTTL DECLARATIONS
0000 63
0000 64 :
0000 65 : Include Files:
0000 66 :
0000 67 :
0000 68 :
0000 69 : Macros:
0000 70 :
0000 71 :
0000 72      $IFBDEF
0000 73      $IRBDEF
0000 74      $DPSECT
0000 75      $RJRDEF
0000 76
0000 77 :
0000 78 : Equated Symbols:
0000 79 :
0000 80 :
0000 81 :
0000 82 : Own Storage:
0000 83 :
0000 84
```

```
0000 86      .SBTTL  RMSS$FIND - COMMON $FIND SETUP AND DISPATCH ROUTINE
0000 87
0000 88      :++
0000 89      : RMSS$FIND
0000 90
0000 91      : this routine performs common rab function setup followed
0000 92      : by dispatch to organization-dependent $find code
0000 93
0000 94      : Calling sequence:
0000 95
0000 96      :     entered from exec as a result of user's calling sys$find
0000 97      :     (e.g., by using the $find macro)
0000 98
0000 99      : Input Parameters:
0000 100
0000 101      :     ap      user's argument list addr
0000 102
0000 103      : Implicit Inputs:
0000 104
0000 105      :     the contents of the rab and related irab and ifab.
0000 106
0000 107      : Output Parameters:
0000 108
0000 109      :     r1      destroyed
0000 110      :     r0      status code
0000 111
0000 112      : Implicit Outputs:
0000 113
0000 114      :     various fields of the rab are filled in to reflect
0000 115      :     the status of the $find operation. (see rms functional
0000 116      :     spec for a complete list.)
0000 117
0000 118      :     the irab is similarly updated.
0000 119
0000 120      :     a completion ast is queued if specified in the user arglist.
0000 121
0000 122      : Completion Codes:
0000 123
0000 124      :     standard rms (see functional spec for list).
0000 125
0000 126      : Side Effects:
0000 127
0000 128      :     none
0000 129
0000 130      :--
0000 131
0000 132      $ENTRY  RMSS$FIND
0000 133      $STPT  FIND
0000 134      $RABSET FAC=IFB$V_GET      : do common setup
0000 135
0000 136      :
0000 137      : returns to user on error
0000 138      :
0000 139
0000 140      SSB      #IRB$V_FIND,(R9)      : flag this as a find
0000 141
0000 142      :
```

```
09 00A0 CA 04 E1 000E 143 ; If AT journaling, get some information from RAB.
      51 OB DO 000E 144 ;
      00000000'EF 16 0014 145 BBC #IFB$V AT,IFB$B_JNLFLG(R10),5$ ; skip if not AT jnlng
      00000000'EF 16 0014 146 MOVL #RJR$_FIND,R1 ; input for AT_COM_RAB
      00000000'EF 16 0017 147 JSB RMSAT_COM_RAB ; get RAB data into RJR
      00000000'EF 16 001D 148 5$:
      00000000'EF 16 001D 149
      00000000'EF 16 001D 150 ;
      00000000'EF 16 001D 151 ; dispatch to org-dependent code
      00000000'EF 16 001D 152 ;
      00000000'EF 16 001D 153
      00000000'EF 16 001D 154 CASE TYPE=B, SRC=IFB$B_ORGCASE(R10),-
      00000000'EF 16 001D 155 DISPLIST=<10$, 20$, 30$> ; seq, rel, idx routines
      00000000'EF 16 0028 156
      00000000'EF 16 0028 157 .IF NE $$RMSTEST&$$RMS_TBUGCHK
      00000000'EF 16 0028 158 BRW RM$ERRORG
      00000000'EF 16 0028 159 .ENDC
      00000000'EF 16 002B 160
      00000000'EF 17 002B 161 10$: JMP RMS$FIND1 ; sequential
      00000000'EF 17 0031 162 20$: JMP RMS$FIND2 ; relative
      00000000'EF 17 0037 163 30$: JMP RMS$FIND3 ; ISAM file
      00000000'EF 17 003D 164
      00000000'EF 17 003D 165 .END
```



RMSOFIND  
Symbol table

DISPATCH FOR FIND OPERATION

M 15

16-SEP-1984 01:18:57 VAX/VMS Macro V04-00  
5-SEP-1984 16:24:58 [RMS.SRC]RMSOFIND.MAR;1

Page 6  
(3)

\$\$PSECT_EP	=	00000000		
\$\$RMSTEST	=	0000001A		
\$\$RMS_PBUGCHK	=	00000010		
\$\$RMS_TBUGCHK	=	00000008		
\$\$RMS_UMODE	=	00000004		
IFBSB_JNLFLG	=	000000A0		
IFBSB_ORGCASE	=	00000023		
IFBSV_AT	=	00000004		
IFBSV_GET	=	00000001		
IRBSV_FIND	=	00000029		
PIOSA_TRACE	*****	X	01	
RJRS_FIND	=	00000008		
RMSAT_COM_RAB	*****	X	01	
RMSERRORG	*****	X	01	
RMSFIND1	*****	X	01	
RMSFIND2	*****	X	01	
RMSFIND3	*****	X	01	
RMSRSET	*****	X	01	
RMS\$FIND	=	FFFFFFFFE	RG	01
TPTSL_FIND	*****	X	01	

-----+  
! Psect synopsis !  
-----+

PSECT name

PSECT name	Allocation	PSECT No.	Attributes															
. ABS .	00000000 (	0.)	00 (	0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE			
RMSRMS	0000003D (	61.)	01 (	1.)	PIC	USR	CON	REL	GBL	NOSHR	EXE	RD	NOWRT	NOVEC	BYTE			
\$ABSS	00000000 (	0.)	02 (	2.)	NOPIC	USR	CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE			

-----+  
! Performance indicators !  
-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.07	00:00:00.87
Command processing	107	00:00:00.70	00:00:05.42
Pass 1	219	00:00:05.34	00:00:15.02
Symbol table sort	0	00:00:00.77	00:00:01.17
Pass 2	43	00:00:00.96	00:00:02.27
Symbol table output	4	00:00:00.05	00:00:00.07
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	406	00:00:07.92	00:00:24.85

The working set limit was 1350 pages.  
27386 bytes (54 pages) of virtual memory were used to buffer the intermediate code.  
There were 30 pages of symbol table space allocated to hold 550 non-local and 7 local symbols.  
165 source lines were read in Pass 1, producing 13 object records in Pass 2.  
17 pages of virtual memory were used to define 16 macros.

+-----+  
! Macro library statistics !  
+-----+

Macro library name	Macros defined
-----	-----
_\$255\$DUA28:[RMS.OBJ]RMS.MLB;1	8
_\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	1
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	3
TOTALS (all libraries)	12

650 GETS were required to define 12 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LISS:RMSOFIND/OBJ=OBJ\$:RMSOFIND MSRC\$:RMSOFIND/UPDATE=(ENH\$:RMSOFIND)+EXECMLS/LIB+LIB\$:RMS/LIB



0329

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